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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,322	12/08/2003	Katsutoshi Katoh	JP920030024US1	2451

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EXAMINER

CHEN, SHIH CHAO

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/730,322

Applicant(s)

KATOH ET AL

Examiner

Shih-Chao Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show other ground parts as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Usui et al. (U.S. Patent No. 6,646,607).

Regarding claim 1, Usui et al. teaches in figures 1-9 an antenna unit [10] provided in a wireless communication apparatus [80] which performs wireless communication, the antenna unit comprising: a radio wave resonance part [18] through which a radio wave is transmitted or received; an antenna ground part [16] electrically connected to the radio wave resonance part; and a connection part [17] which fixes the antenna ground part at such a position that the antenna ground part is closer to the radio wave resonance part than other ground parts [54, 64] of the wireless communication apparatus.

Regarding claim 2, Usui et al. teaches in figures 1-9 the antenna unit according to Claim 1, wherein the antenna ground part [16] is formed integrally with the radio wave resonance part [18].

Regarding claim 3, Usui et al. teaches in figures 1-9 the antenna unit according to Claim 1, further comprising a feeder [33] laid to the radio wave resonance part [18] at

a distance from the antenna ground part [16] and having a shielding conductor [36] connected to the antenna ground part.

Regarding claim 4, Usui et al. teaches in figures 1-9 the antenna unit according to Claim 3, wherein the shielding conductor [36] of the feeder [33] is connected to the antenna ground part [16] on the opposite side of the antenna ground part from the radio wave resonance part [18].

Regarding claim 5, Usui et al. teaches in figures 1-9 the antenna unit according to Claim 1, wherein the wireless communication apparatus [80] has a display panel [86], and the antenna ground part [16] extends outward from a the surface of the display panel away from the display panel (See Figure 8).

Regarding claim 6, Usui et al. teaches in figures 1-9 the antenna unit according to Claim 5, wherein the antenna ground part [16] is positioned adjacent to a region on the display direction side of the display surface of the display panel [86] and on the display panel side of the radio wave resonance part [18].

Regarding claim 9, Usui et al. teaches in figures 1-9 an antenna unit [10] provided in a wireless communication apparatus [80] which performs wireless communication, the antenna unit [10] comprising: a radio wave resonance part [18] through which a radio wave is transmitted or received; an antenna ground part [16] connected to ground; a connection part [17] which fixes the antenna ground part at such a position that the antenna ground part is closer to the radio wave resonance part than other ground parts [54, 64] of the wireless communication apparatus; and a feeder [33] laid to the radio wave resonance part at a distance from the antenna ground part, a

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shielding conductor [36] of the feeder being connected to the antenna ground part on the opposite side of the antenna ground part from the radio wave resonance part, a signal conductor [34] of the feeder being connected to the radio wave resonance part.

Regarding claim 10, Usui et al. teaches in figures 1-9 a wireless communication apparatus [80] which performs wireless communication, the apparatus comprising: a radio wave resonance part [18] through which a radio wave is transmitted or received; an antenna ground part [16] electrically connected to the radio wave resonance part; and a connection part [17] which fixes the antenna ground part at such a position that the antenna ground part is closer to the radio wave resonance part than other ground parts [54, 64] of the wireless communication apparatus.

Regarding claim 11, Usui et al. teaches in figures 1-9 the wireless communication apparatus according to Claim 10, comprising: first and second radio wave resonance parts [18, 28] corresponding to said radio wave resonance part; first and second antenna ground parts [16, 26] corresponding to the antenna ground part and respectively connected to the first and second radio wave resonance parts; and first and second connection parts [17, 27] corresponding to the connection part, the first and second connection parts fixing the first and second antenna ground parts at such positions that each antenna ground part is closer to said first or second radio wave resonance part than other ground parts of the wireless communication apparatus, wherein each of said first and second radio wave resonance part than other ground parts [54, 64] of the wireless communication apparatus, wherein each of the first and

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second radio wave resonance part than other ground parts is used in common in a first frequency band and in a second frequency band for transmission or reception; and the gain of the second radio wave resonance part in the first frequency band is lower than that of the first radio wave resonance part, and the gain of the second radio wave resonance part in the second frequency band is higher than that of the first radio wave resonance part.

Regarding claim 12, Usui et al. teaches in figures 1-9 a wireless communication apparatus [80] which performs wireless communication, the apparatus comprising: a radio wave resonance part [18] through which a radio wave is transmitted or received; an antenna ground part [16] connected to ground; a connection part [17] which fixes the antenna ground part at such a position that the antenna ground part is closer to the radio wave resonance part than other ground parts [54, 64] of the wireless communication apparatus; and a feeder [33] laid to the radio wave resonance part at a distance from the antenna ground part, a shielding conductor [36] of the feeder being connected to the antenna ground part on the opposite side of the antenna ground part from the radio wave resonance part, a signal conductor [34] of the feeder being connected to the radio wave resonance part.

Allowable Subject Matter

4. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-1819. The examiner can normally be reached on Monday-Friday from 7 AM to 4:30 PM, First Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

shih-chao chen

Shih-Chao Chen
Primary Examiner
Art Unit 2821

SXC
February 10, 2005